

DETAILED ACTION

1. This action is in response to the amendment filed on December 23, 2009. Claims 1, 3-8 and 10-12 are pending and have been considered below.

EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Robert Y. Raheja on January 14, 2010.

The Claims in the application has been amended as follows.

In the Claims:

- (1) In claim 1, line 12; insert ~~–at least–~~ between "**the**" and "**one**".
- (2) In claim 7, line 11; delete ~~–other–~~ between "**the**" and "**row**".
- (3) In claim 7, line 11; insert ~~–other than the common row vector or column vector–~~ between "**vector**" and "**in**".
- (4) In claim 7, line 15; replace ~~–a–~~ between "**forming**" and "**multipath**" with ~~–the–~~.

- (5) In claim 7, line 15; replace ~~a~~- between **"and"** and **"data"** with ~~the~~-.
- (6) Please cancel claim 12.

Allowable Subject Matter

- 3. Claims 1, 3-8 and 10-11 are allowed.
- 4. The following is an examiner's statement of reasons for allowance: The prior art of record discloses a system and method for multi path measurement, but prior art fails to disclose that in the system where a multipath characteristic measurement signal array is formed by using one row vector or column vector coefficient array with respect to the multipath characteristic measurement signal, also by forming a data transmission signal array by using a row vector coefficient array that is orthogonal to the row vector or a column vector coefficient array that is orthogonal to the column vector with respect to the plurality of data transmission signals, the transmitted multipath characteristic measurement signal and plurality of data transmission signals are uncorrelated.
- 5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
 - a. Dor et al. (US 7,337,204) discloses a system and method for effectively performing linear transformations.
 - b. Kim et al. (US 7,039,094) discloses a system and method for communication with a adaptive filter based on tab weight related to a time period.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HIRDEPAL SINGH whose telephone number is (571) 270-1688. The examiner can normally be reached on Mon-Fri (Alternate Friday Off) 8:30AM-6:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shuwang Liu can be reached on 571-272-3036. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/H. S./
Examiner, Art Unit 2611
/Shuwang Liu/
Supervisory Patent Examiner, Art Unit 2611